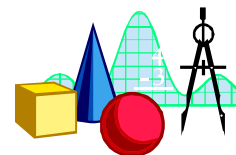


## Highlights

- Staff News
- Customer Assistance
- Workloads
- Projects: Mechanical
- Projects: Electronic

# ESG News



## STAFF NEWS

By the end of 1999, several staff changes will have taken place.

Jason Boyd, Electronics Technician, transferred to a position in the Electrical and Computer Engineering Department in November.

Delwyn Bluhm, Manager of R&D Engineering Services will be retiring December 31, 1999. **A retirement reception honoring Del's 38 years of service will take place on December 15, from 2:00 to 4:00 PM in 301 Spedding Hall.**

Bill Thomas, Electronics Design Engineer, will be retiring December 31, 1999. **A retirement reception honoring Bill's 36 years of service will take place on December 20, from 2:00 to 4:00 PM in 301 Spedding Hall.**

Effective January 1, contact Terry Herrman (4-7896) for technical questions regarding your research needs. Connie Bates (4-7898) can answer procedural and cost analysis questions regarding provided services.

Harold Skank, will be retiring in February 2000 after 36 years of service.

## CUSTOMER ASSISTANCE

ESG shops continue to assist more customers in ISU departments for their equipment fabrication, repair and maintenance needs. *ISU customers may need to furnish a signed Intramural Purchase Order from their departmental office to request services.*

## WORKLOADS

During the first quarter of the new year, workloads in our shops are typically

lighter with faster turnaround. Now is a good time to contact us to start new projects.

## PROJECTS: MECHANICAL

The Mechanical Design Shop recently completed a project for Jack Moorman involving a calorimeter insert (pictured below).



The insert allows samples to reach temperatures of 1.4K. At this temperature, the specific heats are measured under different magnetic fields to define the physical characteristics of the sample.

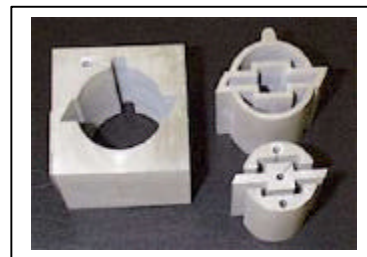
The Mechanical Development Machine Shop recently acquired a Charmilles Robofil 290AWT Wire Feed Electrical Discharge Machine (EDM).



The wire EDM (pictured above) can create any unusual shape that is definable by a moving line in any material that is electrically conductive. It can also precisely create shaped holes or tapered cavities with high depth to diameter ratios. Hardness of the material is not a limitation to what a wire machine can cut. A big plus for wire cutting is the ability to

process parts in their hardened or heat-treated condition.

Extrusion dies and complex compact tensile specimens are examples of work we can fabricate "in-house" with this equipment. We encourage customers to stop by the Machine Shop to see a sample of this new capability. The pieces below were cut on the wire feed EDM.



## PROJECTS: ELECTRONIC

The Electronics Tech Shop recently completed an innovative, ICAP-funded project with Nolin Manufacturing involving remote motor control of a grain distribution system called the 'Haul-All' (pictured below). The Electronics Tech Shop designed and constructed the remote control prototype used to operate the 'Haul-All'. The remote motor control allows the operator to control the flow of the grain from inside the truck cab or other location.



**HAVE A HAPPY  
HOLIDAY SEASON!**